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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/473,323	12/28/1999	RAMESH MAINI	21964-P002US	9848

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EXAMINER

LAGMAN, FREDERICK LYNDON

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/473,323

Applicant(s)

MAINI ET AL.

Examiner

Fr derick L. Lagman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
4a) Of the above claim(s) 42-47 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1, 4, 5, 7, 9, 10, 12, 14, 15, 17, 19 and 20 is/are rejected.
7) ☒ Claim(s) 2, 3, 6, 8, 11, 13, 16, 18 and 21-41 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawagoe #4,735,526 in view of Chun #4,471,709. Kawagoe discloses the claimed invention except for the pretensioned mooring lines. Chun teaches that it is known to provide pretensioned mooring lines 12, 14 as set forth at column 7, lines 24-40. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide pretensioned mooring lines, as taught by Chun in order to facilitate mooring of a vessel or structure at sea.

3. Claims 4, 5, 17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawagoe et al in view of Chun as applied to claim 1 above, and further in view of Petty et al #5,061,131.

As to claims 4 and 5, Kawagoe et al discloses the claimed invention except for the single mooring line extending at equal angles or multiple lines extending in sets. Petty et al teaches that it is known to provide multiple lines 18 extending in sets as shown in figure 1. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide multiple lines extending in sets, as taught by

Petty et al in order to facilitate stabilization of an offshore rig. Kawagoe et al shows a platform moored adjacent a preinstalled gravity structure; however if Kawagoe et al was not adjacent such structure it would have been obvious matter of design choice to have a single line extending at equal angles from the hull extremities, since doing so would facilitate stabilization of the offshore platform.

As to claims 17, 19 and 20, it would have been an obvious matter of design choice to one of ordinary skill in the art at the time the invention was made to have mooring lines at an angle within the range of 20-40 degrees, since doing so would depend upon for example water depth or the length of mooring line. Furthermore, base on the figure drawings of Petty et al, it appears that the angle of the mooring lines is in the range of 20-40 degrees.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawagoe et al in view of Chun as applied to claim 1, and further in view of Westra et al #4,432,671. Kawagoe et al discloses the claimed invention except for the suction anchor. Westra et al teaches that it is known to provide suction anchors for offshore structures as set forth at column 1, lines 10-14. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a suction anchor, as taught by Westra et al in order to facilitate anchoring of an offshore structure.

6. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawagoe et al in view of Chun and Petty et al as applied to claims 4 and 5 above, and further in view of Westra et al #4,432,671. Kawagoe et al as modified by Petty et al discloses the claimed invention except for the suction anchor. Westra et al teaches that it is known to provide suction anchors for offshore structures as set forth at column

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1, lines 10-14. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a suction anchor, as taught by Westra et al in order to facilitate anchoring of an offshore structure.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawagoe et al in view of Chun as applied to claim 1 above, and further in view of Schatzle, Jr. #5,498,107. Kawagoe et al discloses the claimed invention except for the mooring lines made from Kevlar. Schatzle Jr. teaches that it is known to provide mooring lines 18 made from Kevlar as set forth at columns 6-7, lines 65-08. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Kevlar, as taught by Schatzle, Jr. in order to provide a mooring line that is easier to handle and have superior tensile strength.

8. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawagoe et al in view of Chun and Petty et al as applied to claims 4 and 5 above, and further in view of Schatzle, Jr. #5,498,107. Kawagoe et al as modified by Petty et al discloses the claimed invention except for the mooring lines made from Kevlar. Schatzle Jr. teaches that it is known to provide mooring lines 18 made from Kevlar as set forth at columns 6-7, lines 65-08. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Kevlar, as taught by Schatzle, Jr. in order to provide a mooring line that is easier to handle and have superior tensile strength.

Allowabl Subject Matter

9. Claims 2, 3, 6, 8, 11, 13, 16, 18, and 21-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments with respect to the respective claims have been considered but are moot in view of the new ground(s) of rejection.

6. Please also note that claims 42-47 are withdrawn and should be cancelled.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick L. Lagman whose telephone number is 703-305-7456. The examiner can normally be reached on Monday-Friday 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Schackelford can be reached on 703-308-2978. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1134.



Frederick L. Lagman
Examiner
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FLL